



SEQUENCE LISTING

<110> Sibley, David R.
Monsma, Frederick J.
Hamblin, Mark

<120> The ST-B17 Serotonin Receptor

<130> NIH047.1CP1C1

<140> US 09/829,631

<141> 2001-04-10

<150> US 08/428,242

<151> 1995-09-18

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ctagccagga accccacccc catcttatgg catccccggg ggccctattc catcccaggg 180
ctctcaccga gcccgaagct aactttcatt gactcgtcac atcagtaccc ctccccaaac 240
ttcttaccgg agtactccag gtggccctgc gtaggaggca cccctacaac tcctccccgat 300

ctcttgaaat cgctgctcga tgacctaaga accccggtttt gccaatata ctctaagggtg 360
 cagcttcctt tctctcctt tgccttcacc ctgtacctgc agtcaccata tcccgtcttg 420
 gtccctcaacc cagtcctcc atg gtt cca gag cca ggc cct gtc aac agt agc 471
 Met Val Pro Glu Pro Gly Pro Val Asn Ser Ser
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acc cca gcc tgg ggt ccc ggg cca ccg cct gct ccg ggg ggc agc ggc 519
 Thr Pro Ala Trp Gly Pro Gly Pro Pro Pro Ala Pro Gly Gly Ser Gly
 15 20 25

tgg gtg gct gcc gcg ctg tgc gtg gtc atc gtg ctg aca gca gcc gcc 567
 Trp Val Ala Ala Ala Leu Cys Val Val Ile Val Leu Thr Ala Ala Ala
 30 35 40

aat tcg ctg ctg atc gtg ctc att tgc acg cag ccc gcc gtg cgc aac 615
 Asn Ser Leu Leu Ile Val Leu Ile Cys Thr Gln Pro Ala Val Arg Asn
 45 50 55

acg tct aac ttc ttt ctg gtg tcg ctc ttc acg tcg gac ttg atg gtg 663
 Thr Ser Asn Phe Phe Leu Val Ser Leu Phe Thr Ser Asp Leu Met Val
 60 65 70 75

ggg ttg gtg gtg atg ccc cca gcc atg ctg aac gcg ctg tat ggg cgc 711
 Gly Leu Val Val Met Pro Pro Ala Met Leu Asn Ala Leu Tyr Gly Arg
 80 85 90

tgg gtg tta gct cga ggc ctc tgt ctg ctt tgg act gcc ttc gac gtg 759
 Trp Val Leu Ala Arg Gly Leu Cys Leu Leu Trp Thr Ala Phe Asp Val
 95 100 105

atg tgc tgc agc gcc tcc atc ctc aac ctc tgc ctc atc agc ctg gac 807
 Met Cys Cys Ser Ala Ser Ile Leu Asn Leu Cys Leu Ile Ser Leu Asp
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cgc tac ctg ctc atc ctc tcg ccg ctg cgc tac aag ctg cgc atg aca 855
 Arg Tyr Leu Leu Ile Leu Ser Pro Leu Arg Tyr Lys Leu Arg Met Thr
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gcc ccg cga gcc ctg gcg ctc atc ctg ggt gcc tgg agc ctc gcg gcg 903
 Ala Pro Arg Ala Leu Ala Leu Ile Leu Gly Ala Trp Ser Leu Ala Ala
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ctt gcc tcc ttc cta ccc ctc ttg ctg ggc tgg cac gaa ctg ggc aaa 951
 Leu Ala Ser Phe Leu Pro Leu Leu Leu Gly Trp His Glu Leu Gly Lys
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gct cga aca cct gcc cct ggc cag tgc cgc cta ttg gcc agc ctg cct 999
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ttt gtc ctc gtg gcg tcc ggc gtc acc ttt ttc ctg cct tcg ggt gcc 1047
 Phe Val Leu Val Ala Ser Gly Val Thr Phe Phe Leu Pro Ser Gly Ala
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Val	Gln	Val	Ala	Ser	Leu	Thr	Thr	Gly	Thr	Ala	Gly	Gln	Ala	Leu	Glu		
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acc	ttg	cag	gtg	ccc	agg	aca	cca	cgc	cca	ggg	atg	gag	tcc	gct	gac	1191	
Thr	Leu	Gln	Val	Pro	Arg	Thr	Pro	Arg	Pro	Gly	Met	Glu	Ser	Ala	Asp		
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agt	agg	cgt	ctg	gcc	acc	aag	cat	agc	agg	aag	gcc	ttg	aag	gcc	agc	1239	
Ser	Arg	Arg	Leu	Ala	Thr	Lys	His	Ser	Arg	Lys	Ala	Leu	Lys	Ala	Ser		
			255					260					265				
ctg	acc	ctg	ggc	atc	ctg	ctg	gga	atg	ttc	ttt	gtc	acc	tgg	ctg	ccc	1287	
Leu	Thr	Leu	Gly	Ile	Leu	Leu	Gly	Met	Phe	Phe	Val	Thr	Trp	Leu	Pro		
		270					275					280					
ttc	ttt	gtg	gcc	aac	ata	gct	cag	gcc	gtg	tgt	gac	tgc	atc	tcc	cca	1335	
Phe	Phe	Val	Ala	Asn	Ile	Ala	Gln	Ala	Val	Cys	Asp	Cys	Ile	Ser	Pro		
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ggc	ctc	ttc	gat	gtc	ctc	aca	tgg	ctg	ggg	tac	tgt	aat	agc	acc	atg	1383	
Gly	Leu	Phe	Asp	Val	Leu	Thr	Trp	Leu	Gly	Tyr	Cys	Asn	Ser	Thr	Met		
300					305					310					315		
aac	cct	atc	atc	tac	ccg	ctc	ttt	atg	cgg	gac	ttc	aag	agg	gcc	ctg	1431	
Asn	Pro	Ile	Ile	Tyr	Pro	Leu	Phe	Met	Arg	Asp	Phe	Lys	Arg	Ala	Leu		
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ggc	agg	ttc	ctg	cat	gcg	tcc	act	gtc	ccc	cgg	agc	acc	ggc	cag	ccc	1479	
Gly	Arg	Phe	Leu	His	Ala	Ser	Thr	Val	Pro	Arg	Ser	Thr	Gly	Gln	Pro		
			335					340					345				
tgc	ctc	ccc	ctc	cat	gtg	gac	ctc	tca	cag	cgg	tgc	cag	acc	agg	cct	1527	
Cys	Leu	Pro	Leu	His	Val	Asp	Leu	Ser	Gln	Arg	Cys	Gln	Thr	Arg	Pro		
		350					355					360					
cag	ctg	cag	cag	gtg	ctc	gct	ctg	cct	ctg	ccg	cca	aac	tca	gat	tca	1575	
Gln	Leu	Gln	Gln	Val	Leu	Ala	Leu	Pro	Leu	Pro	Pro	Asn	Ser	Asp	Ser		
		365				370					375						
gac	tcc	gct	tca	ggg	ggc	acc	tcg	ggc	ctg	cag	ctc	aca	gcc	cag	ctt	1623	
Asp	Ser	Ala	Ser	Gly	Gly	Thr	Ser	Gly	Leu	Gln	Leu	Thr	Ala	Gln	Leu		
380					385				390					395			
ctg	ctg	cct	gga	gag	gcc	aca	cgg	gac	ccc	ccg	cca	ccc	acc	agg	gcc	1671	
Leu	Leu	Pro	Gly	Glu	Ala	Thr	Arg	Asp	Pro	Pro	Pro	Pro	Thr	Arg	Ala		
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acc	act	gtg	gtc	aac	ttc	ttt	gtc	aca	gac	tct	gtg	gag	cct	gag	ata	1719	
Thr	Thr	Val	Val	Asn	Phe	Phe	Val	Thr	Asp	Ser	Val	Glu	Pro	Glu	Ile		
			415					420					425				

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 Arg Pro His Pro Leu Ser Ser Pro Val Asn
 430 435

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 35 40 45
 Val Leu Ile Cys Thr Gln Pro Ala Val Arg Asn Thr Ser Asn Phe Phe
 50 55 60
 Leu Val Ser Leu Phe Thr Ser Asp Leu Met Val Gly Leu Val Val Met
 65 70 75 80
 Pro Pro Ala Met Leu Asn Ala Leu Tyr Gly Arg Trp Val Leu Ala Arg
 85 90 95
 Gly Leu Cys Leu Leu Trp Thr Ala Phe Asp Val Met Cys Cys Ser Ala
 100 105 110
 Ser Ile Leu Asn Leu Cys Leu Ile Ser Leu Asp Arg Tyr Leu Leu Ile
 115 120 125
 Leu Ser Pro Leu Arg Tyr Lys Leu Arg Met Thr Ala Pro Arg Ala Leu
 130 135 140
 Ala Leu Ile Leu Gly Ala Trp Ser Leu Ala Ala Leu Ala Ser Phe Leu
 145 150 155 160
 Pro Leu Leu Leu Gly Trp His Glu Leu Gly Lys Ala Arg Thr Pro Ala
 165 170 175
 Pro Gly Gln Cys Arg Leu Leu Ala Ser Leu Pro Phe Val Leu Val Ala
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 Ser Gly Val Thr Phe Phe Leu Pro Ser Gly Ala Ile Cys Phe Thr Tyr
 195 200 205
 Cys Arg Ile Leu Leu Ala Ala Arg Lys Gln Ala Val Gln Val Ala Ser
 210 215 220
 Leu Thr Thr Gly Thr Ala Gly Gln Ala Leu Glu Thr Leu Gln Val Pro
 225 230 235 240
 Arg Thr Pro Arg Pro Gly Met Glu Ser Ala Asp Ser Arg Arg Leu Ala
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 Thr Lys His Ser Arg Lys Ala Leu Lys Ala Ser Leu Thr Leu Gly Ile
 260 265 270
 Leu Leu Gly Met Phe Phe Val Thr Trp Leu Pro Phe Phe Val Ala Asn
 275 280 285
 Ile Ala Gln Ala Val Cys Asp Cys Ile Ser Pro Gly Leu Phe Asp Val
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 Pro Leu Phe Met Arg Asp Phe Lys Arg Ala Leu Gly Arg Phe Leu His

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Thr Ser Asn Phe Phe Leu Val Ser Leu Phe Thr Ser Asp Leu Met Val	
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Gly Leu Val Val Met Pro Pro Ala Met Leu Asn Ala Leu Tyr Gly Arg	
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Trp Val Leu Ala Arg Gly Leu Cys Leu Leu Trp Thr Ala Phe Asp Val	
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Arg Tyr Leu Leu Ile Leu Ser Pro Leu Arg Tyr Lys Leu Arg Met Thr	
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Ala Pro Arg Ala Leu Ala Leu Ile Leu Gly Ala Trp Ser Leu Ala Ala	
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Leu Ala Ser Phe Leu Pro Leu Leu Leu Gly Trp His Glu Leu Gly Lys	
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Phe Val Leu Val Ala Ser Gly Val Thr Phe Phe Leu Pro Ser Gly Ala	
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Ile Cys Phe Thr Tyr Cys Arg Ile Leu Leu Ala Ala Arg Lys Gln Ala	
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Val Gln Val Ala Ser Leu Thr Thr Gly Thr Ala Gly Gln Ala Leu Glu	
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Thr Leu Gln Val Pro Arg Thr Pro Arg Pro Gly Met Glu Ser Ala Asp	
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agt agg cgt ctg gcc acc aag cat agc agg aag gcc ttg aag gcc agc	1239
Ser Arg Arg Leu Ala Thr Lys His Ser Arg Lys Ala Leu Lys Ala Ser	
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ctg acc ctg ggc atc ctg ctg gga atg ttc ttt gtc acc tgg ctg ccc	1287
Leu Thr Leu Gly Ile Leu Leu Gly Met Phe Phe Val Thr Trp Leu Pro	

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	Ala Val Cys Asp		
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aag agg gcc ctg ggc agg ttc ctg cat gcg tcc act gtc ccc cgg agc	1661		
Lys Arg Ala Leu Gly Arg Phe Leu His Ala Ser Thr Val Pro Arg Ser			
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Thr Gly Gln Pro Cys Leu Pro Leu His Val Asp Leu Ser Gln Arg Cys			
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cag acc agg cct cag ctg cag cag gtg ctc gct ctg cct ctg ccg cca	1757		
Gln Thr Arg Pro Gln Leu Gln Gln Val Leu Ala Leu Pro Leu Pro Pro			
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Asn Ser Asp Ser Asp Ser Ala Ser Gly Gly Thr Ser Gly Leu Gln Leu			
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Thr Ala Gln Leu Leu Leu Pro Gly Glu Ala Thr Arg Asp Pro Pro Pro			
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ccc acc agg gcc acc act gtg gtc aac ttc ttt gtc aca gac tct gtg	1901		
Pro Thr Arg Ala Thr Thr Val Val Asn Phe Phe Val Thr Asp Ser Val			
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gag cct gag ata cgg ccg cat cca ctc agt tcc ccc gtg aac	1943		
Glu Pro Glu Ile Arg Pro His Pro Leu Ser Ser Pro Val Asn			
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tgaccaggtc aagagctggc cattggaggc cacattcccg gagctctcag cccactctcc	2003		
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<213> Rat

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Leu	Cys	Val	Val	Ile	Val	Leu	Thr	Ala	Ala	Ala	Asn	Ser	Leu	Leu	Ile
	35						40					45			
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Leu	Val	Ser	Leu	Phe	Thr	Ser	Asp	Leu	Met	Val	Gly	Leu	Val	Val	Met
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Pro	Pro	Ala	Met	Leu	Asn	Ala	Leu	Tyr	Gly	Arg	Trp	Val	Leu	Ala	Arg
			85						90					95	
Gly	Leu	Cys	Leu	Leu	Trp	Thr	Ala	Phe	Asp	Val	Met	Cys	Cys	Ser	Ala
			100					105					110		
Ser	Ile	Leu	Asn	Leu	Cys	Leu	Ile	Ser	Leu	Asp	Arg	Tyr	Leu	Leu	Ile
	115						120					125			
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Ala	Leu	Ile	Leu	Gly	Ala	Trp	Ser	Leu	Ala	Ala	Leu	Ala	Ser	Phe	Leu
145					150					155					160
Pro	Leu	Leu	Leu	Gly	Trp	His	Glu	Leu	Gly	Lys	Ala	Arg	Thr	Pro	Ala
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Pro	Gly	Gln	Cys	Arg	Leu	Leu	Ala	Ser	Leu	Pro	Phe	Val	Leu	Val	Ala
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Ser	Gly	Val	Thr	Phe	Phe	Leu	Pro	Ser	Gly	Ala	Ile	Cys	Phe	Thr	Tyr
	195						200					205			
Cys	Arg	Ile	Leu	Leu	Ala	Ala	Arg	Lys	Gln	Ala	Val	Gln	Val	Ala	Ser
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			260					265					270		
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<212> PRT

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		20						25					30		
Met	Arg	Asp	Phe	Lys	Arg	Ala	Leu	Gly	Arg	Phe	Leu	His	Ala	Ser	Thr
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Val Pro Arg Ser Thr Gly Gln Pro Cys Leu Pro Leu His Val Asp Leu
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 Ser Gln Arg Cys Gln Thr Arg Pro Gln Leu Gln Gln Val Leu Ala Leu
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 Pro Leu Pro Pro Asn Ser Asp Ser Asp Ser Ala Ser Gly Gly Thr Ser
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 Gly Leu Gln Leu Thr Ala Gln Leu Leu Pro Gly Glu Ala Thr Arg
 100 105 110
 Asp Pro Pro Pro Pro Thr Arg Ala Thr Thr Val Val Asn Phe Phe Val
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 Val Asn
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 <222> (135)...(1454)

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 caccctcggt cctc atg gtc cca gag ccg ggc cca acc gcc aat agc acc 170
 Met Val Pro Glu Pro Gly Pro Thr Ala Asn Ser Thr
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 ccg gcc tgg ggg gca ggc gcc cgt cgn nng ggg ggc agc ggc tgg gtg 218
 Pro Ala Trp Gly Ala Gly Ala Arg Arg Xaa Gly Gly Ser Gly Trp Val
 15 20 25

 gcg gcc ggc ctg tgc gtg gtc atc gcg ctg acg gcg gcg gcc aac tcg 266
 Ala Ala Gly Leu Cys Val Val Ile Ala Leu Thr Ala Ala Ala Asn Ser
 30 35 40

 ctg ctg atc gcg ctc atc tgc act cag ccc gcg ctg cgc aac acg tcc 314
 Leu Leu Ile Ala Leu Ile Cys Thr Gln Pro Ala Leu Arg Asn Thr Ser
 45 50 55 60

 aac ttc ttc ctg gtg tgc ctc ttc acg tct gac ctg atg gtc ggg ctg 362
 Asn Phe Phe Leu Val Ser Leu Phe Thr Ser Asp Leu Met Val Gly Leu
 65 70 75

 gtg gtg atg ccg ccg gcc atg ctg aac gcg ctg tac ggg cgc tgg gtg 410
 Val Val Met Pro Pro Ala Met Leu Asn Ala Leu Tyr Gly Arg Trp Val
 80 85 90

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Leu Ala Arg Gly Leu Cys Leu Leu Trp Thr Ala Phe Asp Val Met Cys	
95 100 105	
tgc agc gcc tcc atc ctc aac ctc tgc ctc atc agc ctg gac cgc tac	506
Cys Ser Ala Ser Ile Leu Asn Leu Cys Leu Ile Ser Leu Asp Arg Tyr	
110 115 120	
ctg ctc atc ctc tgc ccg ctg cgc tac aag ctg cgc atg acg ccc ctg	554
Leu Leu Ile Leu Ser Pro Leu Arg Tyr Lys Leu Arg Met Thr Pro Leu	
125 130 135 140	
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Arg Ala Leu Ala Leu Val Leu Gly Gly Trp Ser Leu Ala Ala Leu Ala	
145 150 155	
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Ser Phe Leu Pro Leu Leu Leu Gly Trp His Glu Leu Gly His Ala Arg	
160 165 170	
cca ccc gtc cct ggc cag tgc cgc ctg ctg gcc agc ctg cct ttt gtc	698
Pro Pro Val Pro Gly Gln Cys Arg Leu Leu Ala Ser Leu Pro Phe Val	
175 180 185	
ctt gtg gcg tgc ggc ctc acc ttc ttc ctg ccc tgc ggt gcc ata tgc	746
Leu Val Ala Ser Gly Leu Thr Phe Phe Leu Pro Ser Gly Ala Ile Cys	
190 195 200	
ttc acc tac tgc agg atc ctg cta gct gcc cgc aag cag gcc gtg cag	794
Phe Thr Tyr Cys Arg Ile Leu Leu Ala Ala Arg Lys Gln Ala Val Gln	
205 210 215 220	
gtg gcc tcc ctc acc acc ggc atg gcc agt cag gcc tgc gag acg ctg	842
Val Ala Ser Leu Thr Thr Gly Met Ala Ser Gln Ala Ser Glu Thr Leu	
225 230 235	
cag gta ccc agg agc cca gcg gca ggg gtg gag tct gct gac agc agg	890
Gln Val Pro Arg Ser Pro Ala Ala Gly Val Glu Ser Ala Asp Ser Arg	
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cgt cta gca acg aag agc agc agg aag ggc ctg aag gcc agc atg acg	938
Arg Leu Ala Thr Lys Ser Ser Arg Lys Gly Leu Lys Ala Ser Met Thr	
255 260 265	
ctg ggc atc ctg ctg ggc atg ttc ttt gtg acc tgg ttg ccc ttc ttt	986
Leu Gly Ile Leu Leu Gly Met Phe Phe Val Thr Trp Leu Pro Phe Phe	
270 275 280	
gtg gcc aac ata gtc cag gcc gtg tgc gac tgc atc tcc cca ggc ctc	1034
Val Ala Asn Ile Val Gln Ala Val Cys Asp Cys Ile Ser Pro Gly Leu	
285 290 295 300	
ttc gat gtc ctc aca tgg ctg ggt tac tgt aac agc acc atg aac ccc	1082
Phe Asp Val Leu Thr Trp Leu Gly Tyr Cys Asn Ser Thr Met Asn Pro	

305	310	315	
atc atc tac cca ctc ttc atg ctg gac ttc aag cgg gcg ctg ggc agg			1130
Ile Ile Tyr Pro Leu Phe Met Leu Asp Phe Lys Arg Ala Leu Gly Arg			
320	325	330	
ttc ctg cca tgt cca cgc tgt ccc cgg gag ccc agg cca gcc tgg cct			1178
Phe Leu Pro Cys Pro Arg Cys Pro Arg Glu Pro Arg Pro Ala Trp Pro			
335	340	345	
cgc cat cac tgc gca cct ctc aca gcg gcc ccc ggc ccg gcc tta gcc			1226
Arg His His Cys Ala Pro Leu Thr Ala Ala Pro Gly Pro Ala Leu Ala			
350	355	360	
tac agc agg tgc tgc cgc tgc ccc tgc cgc cgg act cag att cgg act			1274
Tyr Ser Arg Cys Cys Arg Cys Pro Cys Arg Arg Thr Gln Ile Arg Thr			
365	370	375	380
cag acg cag gct cag gcg gct cct cgg gcg tgc ggc tca cgg ccc agc			1322
Gln Thr Gln Ala Gln Ala Ala Pro Arg Ala Cys Gly Ser Arg Pro Ser			
385	390	395	
tgc tgc ttc ctg gcg agg cca ccc agg acc ccc cgc tgc cca cca ggg			1370
Cys Cys Phe Leu Ala Arg Pro Pro Arg Thr Pro Arg Cys Pro Pro Gly			
400	405	410	
ccg ctg ccg ccg tca att tct tca aca tcg sac ccc gcg gag ccc gag			1418
Pro Leu Pro Pro Ser Ile Ser Ser Thr Ser Xaa Pro Ala Glu Pro Glu			
415	420	425	
ctg cgg ccg cat cca ctt ggc atc ccc acg aac tga cccggcttgg			1464
Leu Arg Pro His Pro Leu Gly Ile Pro Thr Asn *			
430	435		
ggctggccaa tggggagctg gattgagcag aaccagacc ctgagtcctt gggccagctc			1524
ttggctaaga ccaggaggct gcaagtctcc tagaagccct ctgagctcca gaggggtgcg			1584
gcagagctga cccctgctg ccattctccag gcccttacc tgcagggatc atagctgact			1644
aga			1647

<210> 13
 <211> 439
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(439)
 <223> Xaa = Any Amino Acid

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 1 5 10 15
 Ala Gly Ala Arg Xaa Xaa Gly Gly Ser Gly Trp Val Ala Ala Gly Leu
 20 25 30
 Cys Val Val Ile Ala Leu Thr Ala Ala Ala Asn Ser Leu Leu Ile Ala

	35					40					45				
Leu	Ile	Cys	Thr	Gln	Pro	Ala	Leu	Arg	Asn	Thr	Ser	Asn	Phe	Phe	Leu
50						55					60				
Val	Ser	Leu	Phe	Thr	Ser	Asp	Leu	Met	Val	Gly	Leu	Val	Val	Met	Pro
65					70					75					80
Pro	Ala	Met	Leu	Asn	Ala	Leu	Tyr	Gly	Arg	Trp	Val	Leu	Ala	Arg	Gly
				85					90					95	
Leu	Cys	Leu	Leu	Trp	Thr	Ala	Phe	Asp	Val	Met	Cys	Cys	Ser	Ala	Ser
			100					105					110		
Ile	Leu	Asn	Leu	Cys	Leu	Ile	Ser	Leu	Asp	Arg	Tyr	Leu	Leu	Ile	Leu
		115					120					125			
Ser	Pro	Leu	Arg	Tyr	Lys	Leu	Arg	Met	Thr	Pro	Leu	Arg	Ala	Leu	Ala
	130					135					140				
Leu	Val	Leu	Gly	Gly	Trp	Ser	Leu	Ala	Ala	Leu	Ala	Ser	Phe	Leu	Pro
145					150					155					160
Leu	Leu	Leu	Gly	Trp	His	Glu	Leu	Gly	His	Ala	Arg	Pro	Pro	Val	Pro
			165						170					175	
Gly	Gln	Cys	Arg	Leu	Leu	Ala	Ser	Leu	Pro	Phe	Val	Leu	Val	Ala	Ser
			180					185					190		
Gly	Leu	Thr	Phe	Phe	Leu	Pro	Ser	Gly	Ala	Ile	Cys	Phe	Thr	Tyr	Cys
		195				200						205			
Arg	Ile	Leu	Leu	Ala	Ala	Arg	Lys	Gln	Ala	Val	Gln	Val	Ala	Ser	Leu
	210					215					220				
Thr	Thr	Gly	Met	Ala	Ser	Gln	Ala	Ser	Glu	Thr	Leu	Gln	Val	Pro	Arg
225					230					235					240
Ser	Pro	Ala	Ala	Gly	Val	Glu	Ser	Ala	Asp	Ser	Arg	Arg	Leu	Ala	Thr
			245						250					255	
Lys	Ser	Ser	Arg	Lys	Gly	Leu	Lys	Ala	Ser	Met	Thr	Leu	Gly	Ile	Leu
		260						265					270		
Leu	Gly	Met	Phe	Phe	Val	Thr	Trp	Leu	Pro	Phe	Phe	Val	Ala	Asn	Ile
		275					280					285			
Val	Gln	Ala	Val	Cys	Asp	Cys	Ile	Ser	Pro	Gly	Leu	Phe	Asp	Val	Leu
	290					295					300				
Thr	Trp	Leu	Gly	Tyr	Cys	Asn	Ser	Thr	Met	Asn	Pro	Ile	Ile	Tyr	Pro
305					310					315					320
Leu	Phe	Met	Leu	Asp	Phe	Lys	Arg	Ala	Leu	Gly	Arg	Phe	Leu	Pro	Cys
			325						330					335	
Pro	Arg	Cys	Pro	Arg	Glu	Pro	Arg	Pro	Ala	Trp	Pro	Arg	His	His	Cys
			340					345					350		
Ala	Pro	Leu	Thr	Ala	Ala	Pro	Gly	Pro	Ala	Leu	Ala	Tyr	Ser	Arg	Cys
		355					360					365			
Cys	Arg	Cys	Pro	Cys	Arg	Arg	Thr	Gln	Ile	Arg	Thr	Gln	Thr	Gln	Ala
	370					375					380				
Gln	Ala	Ala	Pro	Arg	Ala	Cys	Gly	Ser	Arg	Pro	Ser	Cys	Cys	Phe	Leu
385					390					395					400
Ala	Arg	Pro	Pro	Arg	Thr	Pro	Arg	Cys	Pro	Pro	Gly	Pro	Leu	Pro	Pro
			405						410					415	
Ser	Ile	Ser	Ser	Thr	Ser	Xaa	Pro	Ala	Glu	Pro	Glu	Leu	Arg	Pro	His
			420					425					430		
Pro	Leu	Gly	Ile	Pro	Thr	Asn									
		435													